
Teaming

Or Partnerships

The Multi-Party Relationship

◆ Unique Advantages for Government

- Technical insight
 - ★ Visibility at all levels
- Leverage of resources
 - ★ Risk reduction (resource sharing)
- Decreased oversight requirements
 - ★ Self-policing

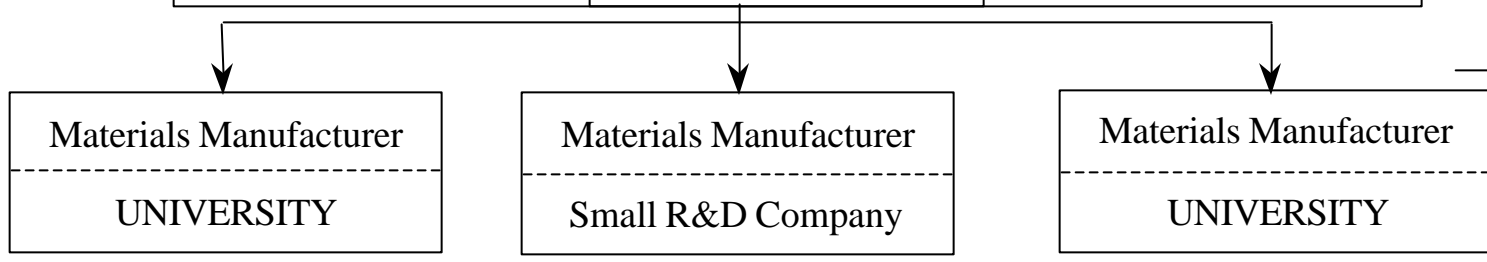
Technology Investment Agreement Affordable Composites for Propulsion (ACP)

	<u>Contractor Cost Share</u>	<u>Government Cost Share</u>	<u>Total Value</u>
Alliant Techsystems, Inc.	\$ 14,674,000	\$ 11,499,000	\$ 26,173,000
Boeing (Commercial Airplane Grp.	19,302,000	3,970,000	23,272,000
Dow-UTC Products, Inc.	16,749,000	25,988,000	42,737,000
E.I. du Pont de Nemours and Co.	8,686,000	9,103,000	17,789,000
Northrop Grumman	45,100,000	21,421,000	66,521,000
UTC-P&W	<u>135,489,000</u>	<u>58,019,000</u>	<u>193,508,000</u>
Total Other Transactions	<u>\$240,000,000</u>	<u>\$130,000,000</u>	<u>\$370,000,000</u>

The period of performance for this other transaction is 16 May 1994 through 15 May 2000.

Consortium Lead,
UTC-P&W

Funding
Sources
and
Overall
Management
(funds pass
through - no
burden)



R&D
Performance
Teams

Technology Investment Agreement - ACP

- ◆ Focus: increasing performance and fuel efficiency of future jet engines by inserting polymer composite material
- ◆ Objectives: Demonstrate low cost, reliable manufacturing approaches. Goals: 20% reduction in weight and 20% cost savings
- ◆ Team Approach: Polymer composite vendors, engine designers, and airframe companies
- ◆ Results to date: Achieved goals, cumulative benefits expected to exceed \$500 M per year

The Multi-Party Relationship, ACP's Thoughts

- ◆ Teaming relationship rather than a buyer/seller relationship engendered a stronger sharing of responsibilities and rewards of accomplishment. Team members were more willing to accept risks and share awards. (REDUCED OVERALL PROGRAM RISKS)

The Multi-Party Relationship, ACP's Thoughts

- ◆ Management group made program decisions faster; changes to the program schedule and statement of work, etc. An estimated reduction in technology lead time by 30-50%. As new problems or needs arose we addressed these needs by refocusing the program quickly. (FASTER)
- ◆ Allowed commercial companies to participate (BROADER, INDUSTRIAL BASE)

The Multi-Party Relationship, ACP's Thoughts

- ◆ Total cost to the Government reduced by 65% or more due to private industry contributions (LEVERAGING COMMERCIAL SECTOR'S RESEARCH, PRODUCTS AND PROCESSES)

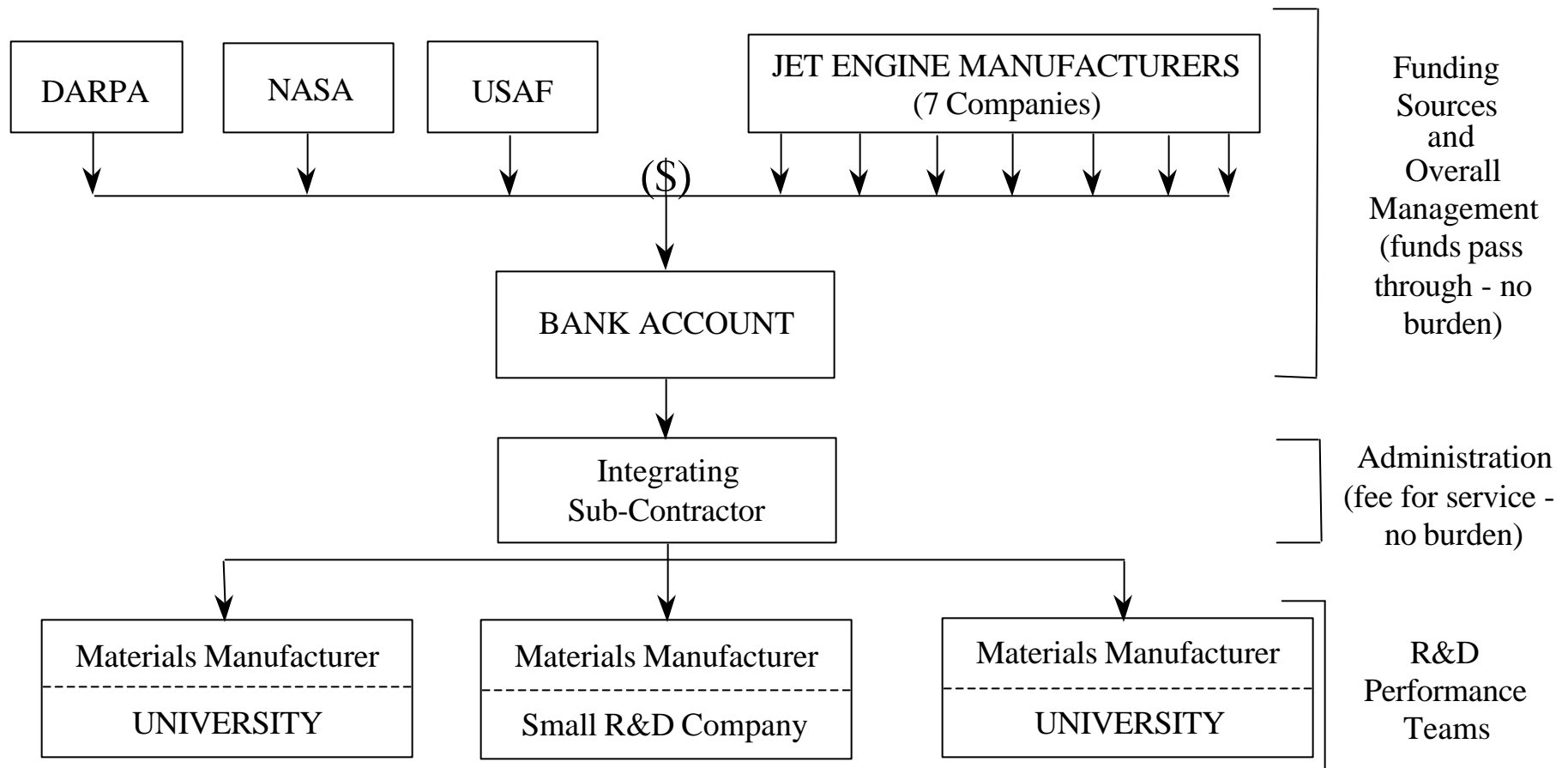
The Multi-Party Relationship, ACP's Thoughts

- ◆ Indirect burdens, including G&A were eliminated by directly funding team members. Estimated 15-20%% more work was accomplished through the use of this Other Transaction (CHEAPER).

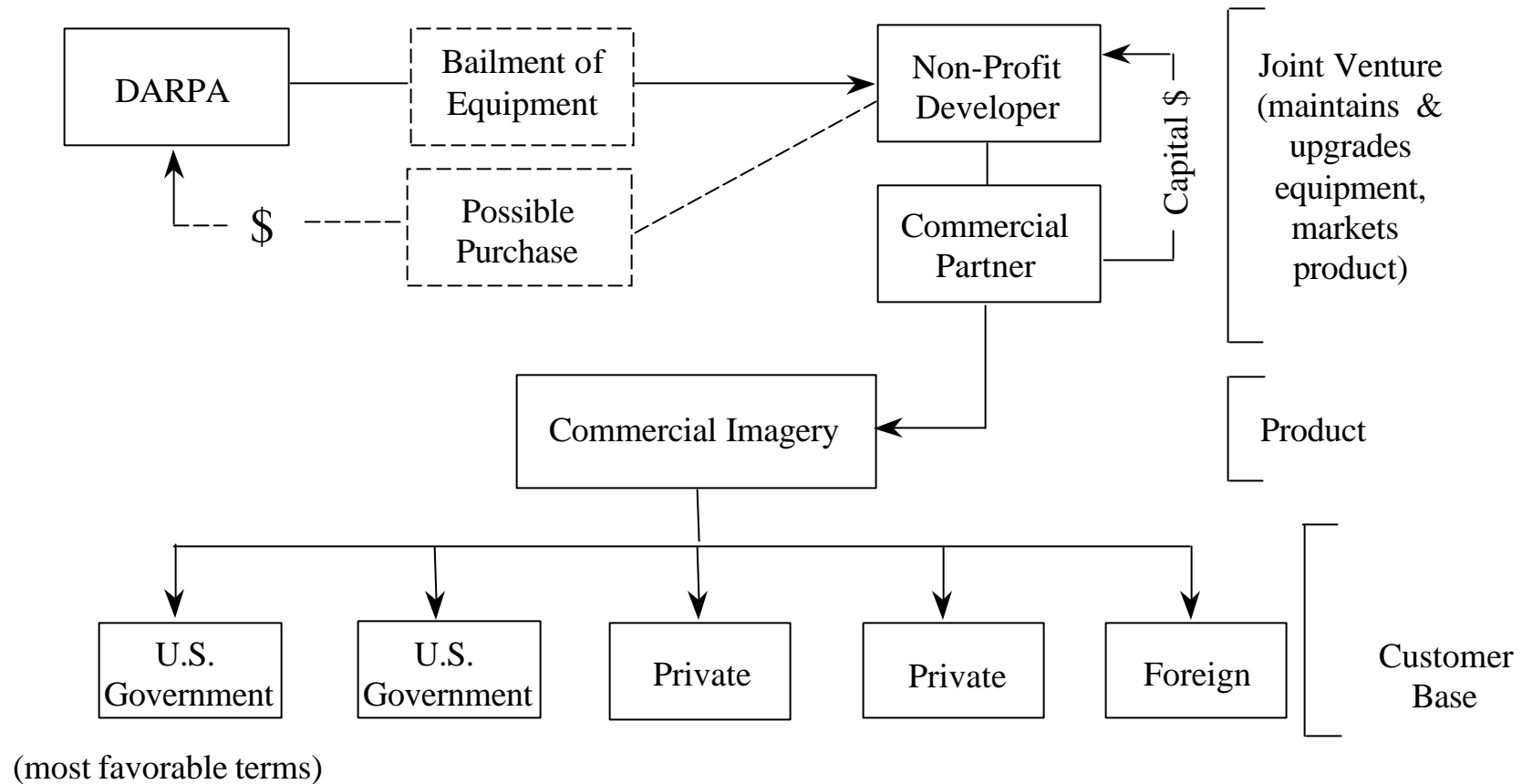
The Multi-Party Relationship, ACP's Thoughts

- ◆ Team members willing to make investments, because ownership of:
 - Capital assets to provide the latest/modern facilities. (INDUSTRIAL MODERNIZATION)
 - Team's Intellectual Property Rights was retained, (PROVIDED INDUSTRY TECHNOLOGY)

Technology Investment Agreement



“Facility” Commercialization



Dual-Frequency, Foliage Penetrating Interferometric Geographic Synthetic Aperture Radar System

GeoSar

CALTECH/JPL, California DoC, CALGIS, Inc.

\$33 Million, 42 Months, Started 7/96

Technology Integration & Transfer

